

## Claims

1. Impacting instrument for games with a playing object moved in an impacting or intermittent manner, comprising an actuating part and an impact part, which enters into direct dynamic operative connection with the play object and is constructed at least partially as a stiff solid object, characterized by a plurality of singular three-dimensional and/or two-dimensional and/or one-dimensional regions, which differ from at least a part of their respective surroundings by at least one vibration-relevant, especially resonance relevant material parameter and/or shape parameter or dimension parameter, especially by a different mass, mass density, deformation stiffness and/or damping and form the at least one sequence, extending over at least one part of the impacting instrument and corresponding to at least one ordered series.

2. The impacting instrument of claim 1, characterized in that at least one sequence of singular regions is disposed at or in the impact part.

3. The impacting instrument of one of the preceding claims, with an actuating part, constructed particularly as a handle, characterized in that at least one sequence of singular regions is disposed at or in the actuating part

4. The impacting instrument of one of the preceding claims, characterized in that at least one sequence of singular regions is provided, which extends at a surface or in a part of the impacting instrument body near the surface.

5. The impacting instrument of one of the preceding claims, characterized in that at least one sequence of singular regions is provided, which

extends within the volume of the solid body or in an inner space of the impacting instrument body.

6. The impacting instrument of one of the preceding claims, characterized in that at least one sequence is formed by extended, especially strip-like singular regions.

7. The impacting instrument of one of the preceding claims, characterized in that, in at least one part of at least one sequence, the mutual edge distances and/or the distances between the centers of singular regions are dimensioned in such a manner in the sequential direction of the series, that a vibrationally active organization with a plurality of characteristic vibrations results.

8. The impacting instrument of claim 7, characterized in that in at least one part of at least one sequence, a variance, progressive and/or degressive with respect to the sequential direction, is provided with respect to the singular regions or their vibrationally-relevant parameters.

9. The impacting instrument of claims 7 or 8, characterized in that at least one sequence of singular regions, vibrationally varying at least sectionally, is provided.

10. The impacting instrument of one of the claims 7 to 9, characterized in that at least one sequence of singular regions, varying at least sectionally in accordance with a statistically varying series, which can be generated especially by a random generator, is provided.

11. The impacting instrument of one of the preceding claims, characterized in that at least one sequence of singular regions, formed at least sectionally and at least approximately according to a harmonic series, is provided.

12. The impacting instrument of one of the preceding claims, characterized in that at least one sequence of singular regions, formed at least sectionally and at least approximately according to a geometric series, is provided.

13. The impacting instrument of one of the preceding claims, characterized by at least one vibrationally active organization, which contains at least one one-dimensionally, two-dimensionally or three-dimensionally extending superimposition structure of a majority, especially a plurality of different interval and/or subdivision and/or value sequences.

14. The impacting instrument of claim 13, characterized in that the superimposition structure contains at least two different, however at least approximately equally distant interval and/or subdivision and/or value sequences.

15. The impacting instrument of claims 13 of 14, characterized in that the value and/or the distribution of at least one vibrational parameter of the singular regions are dimensioned at least approximately equally within one of the mutually superimposed sequences.

16. The impacting instrument of one of the claims 13 to 15, characterized in that the values and/or the distribution of at least one vibrational parameter of the consecutively following singular regions in each case are dimensioned within one of the mutually superimposed series at least approximately or

at least sectionally according to at least one harmonic or at least one geometric series or according to a superimposition of such series.

17. The impacting instrument of one of the preceding claims, characterized in that at least one varying, especially harmonically or geometrically varying sequence of singular regions, extending multidimensionally or in a plurality of two-dimensionally or three-dimensionally directions, is provided.

18. The impacting instrument of one of the preceding claims, characterized in that at least one vibrationally active sequence of singular regions is provided, which extends at least over five divisions and preferably over a plurality of divisions.

19. The impacting instrument of one of the preceding claims, characterized in that at least one superimposition of at least two vibrationally active sequences of singular regions, especially a superimposition of a plurality of such vibrationally active sequences is provided.

20. The impacting instrument of one of the preceding claims, characterized in that at least one vibrationally active varying series of singular regions, disposed distributed along at least one edge of the impacting instrument body, is provided

21. The impacting instrument of one of the preceding claims, characterized by at least one vibrationally active, organized surface layer or at least one layer section with a granulate, lacquer and/or film coating, especially with a metal content.

22. The impacting instrument of one of the preceding claims, characterized by a construction as hockey stick.

23. The impacting instrument of one of the preceding claims, characterized by a construction as golf club.

24. The impacting instrument of one of the preceding claims, characterized a construction as baseball bat.